FIGURE 1

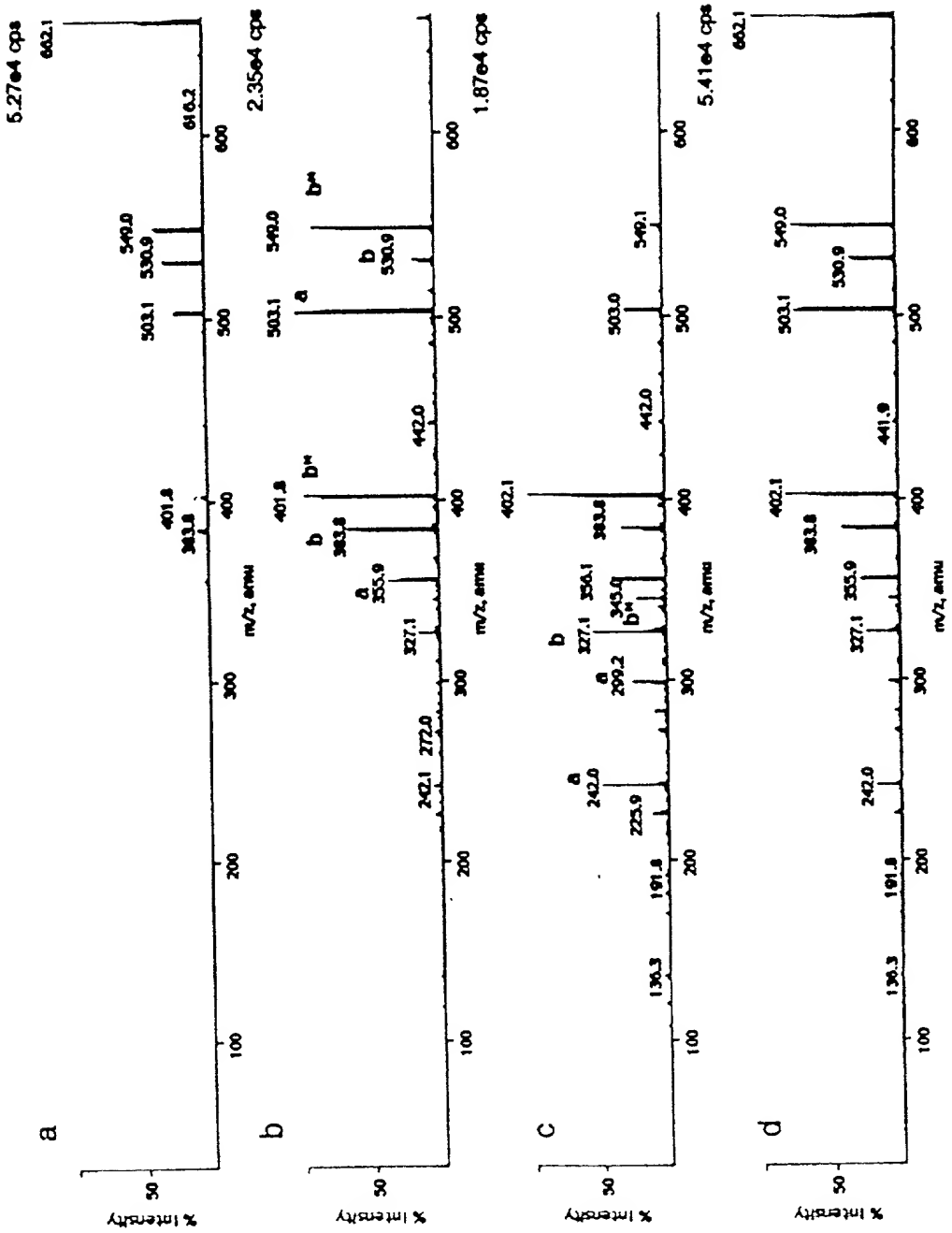

a
b
c
d
5.27e4 cps
2.35e4 cps
1.87e4 cps
5.41e4 cps
% Intensity
m/z, amu

FIGURE 2

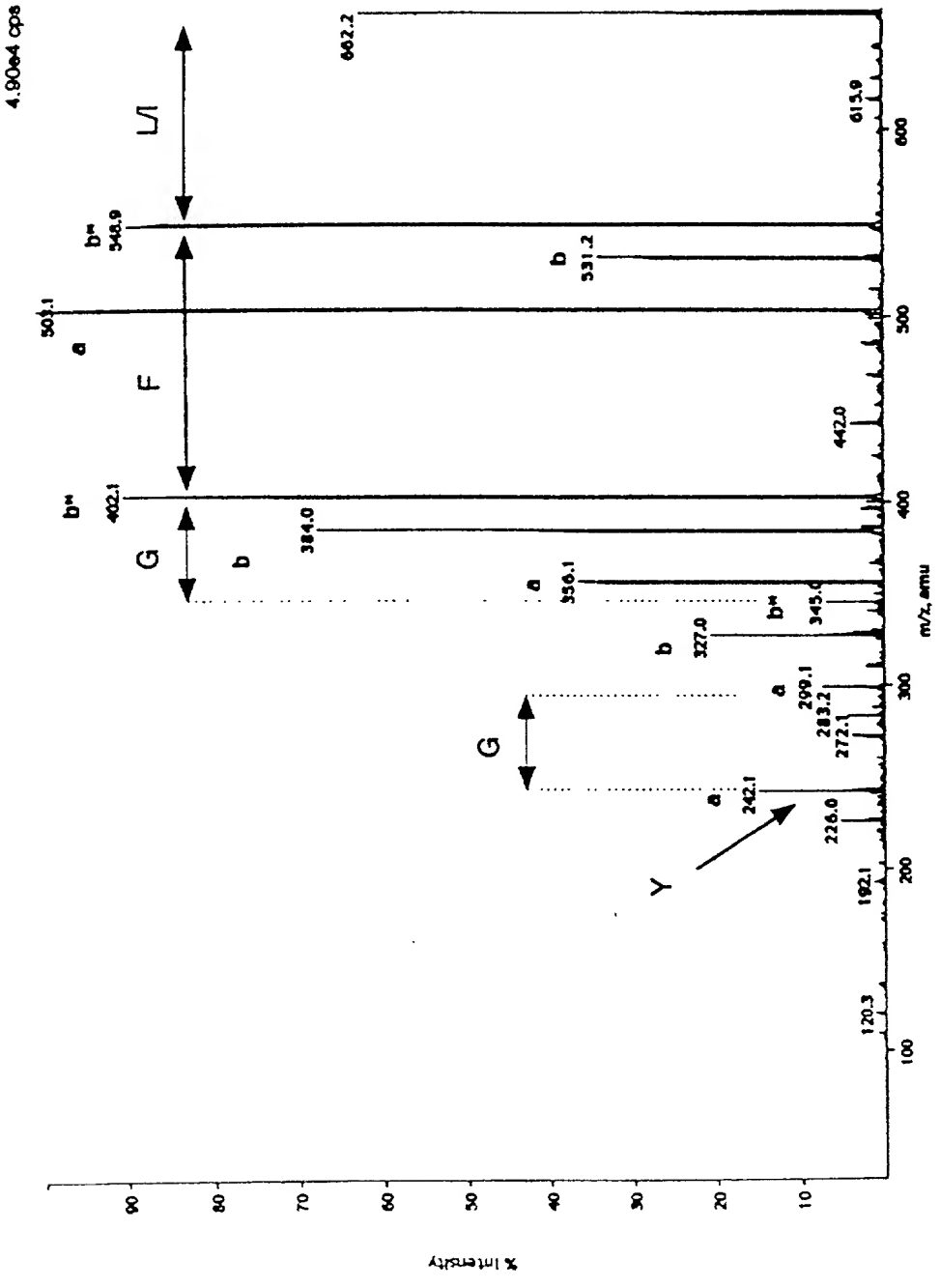

4.90e4 cps
% Intensity
m/z, amu
662.2
615.9
501.1
442.0
402.1
384.0
348.9
345.0
336.1
331.2
327.0
299.1
283.2
272.1
242.1
226.0
192.1
120.3
F
G
G
Y
L/I

FIGURE 3

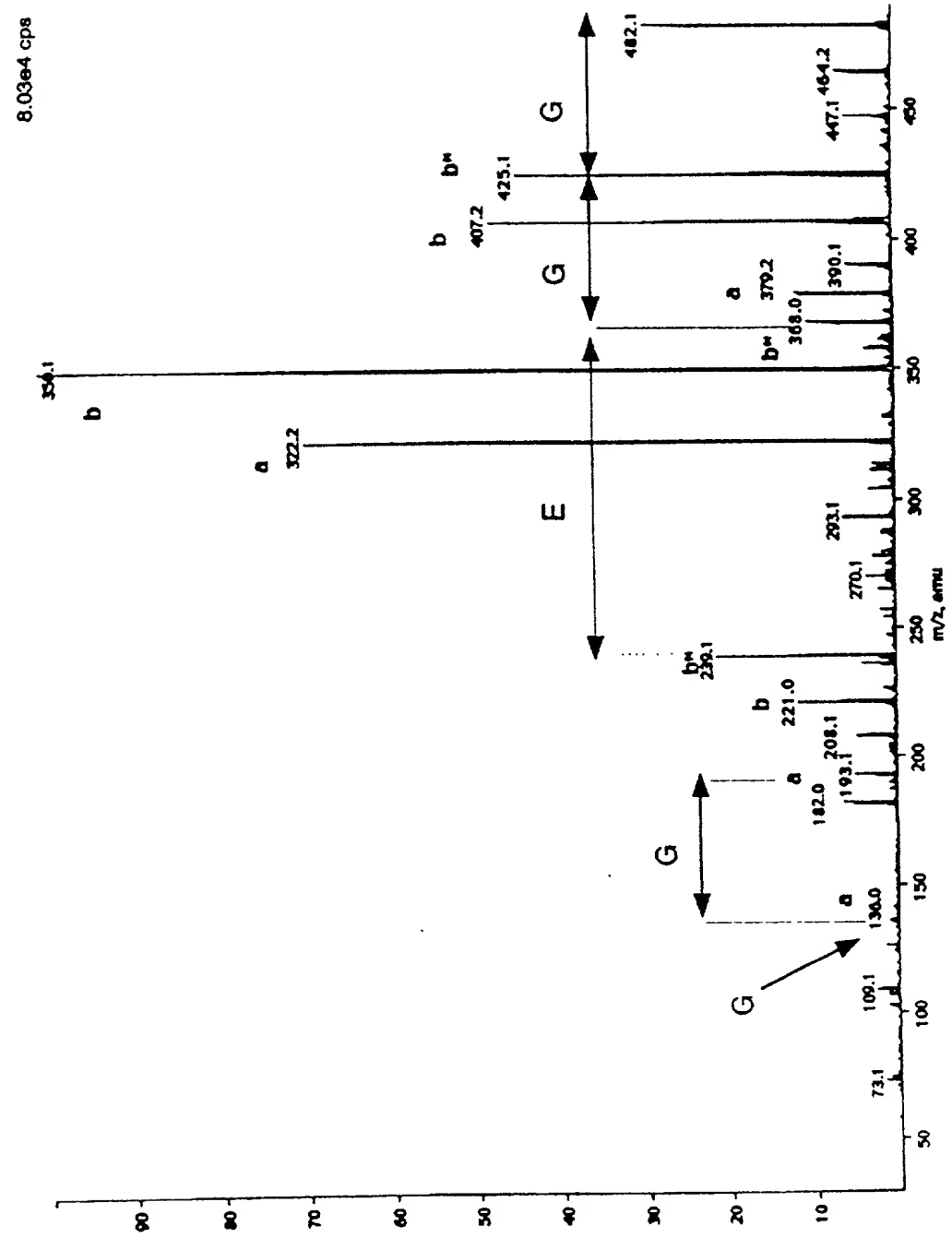

8.03e4 cps
m/z, amu
G
G
G
E
a
b
b*
a*
73.1
109.1
136.0
182.0
193.1
208.1
221.0
236.1
270.1
293.1
322.2
350.1
368.0
379.2
390.1
407.2
425.1
447.1
464.2
482.1

FIGURE 4

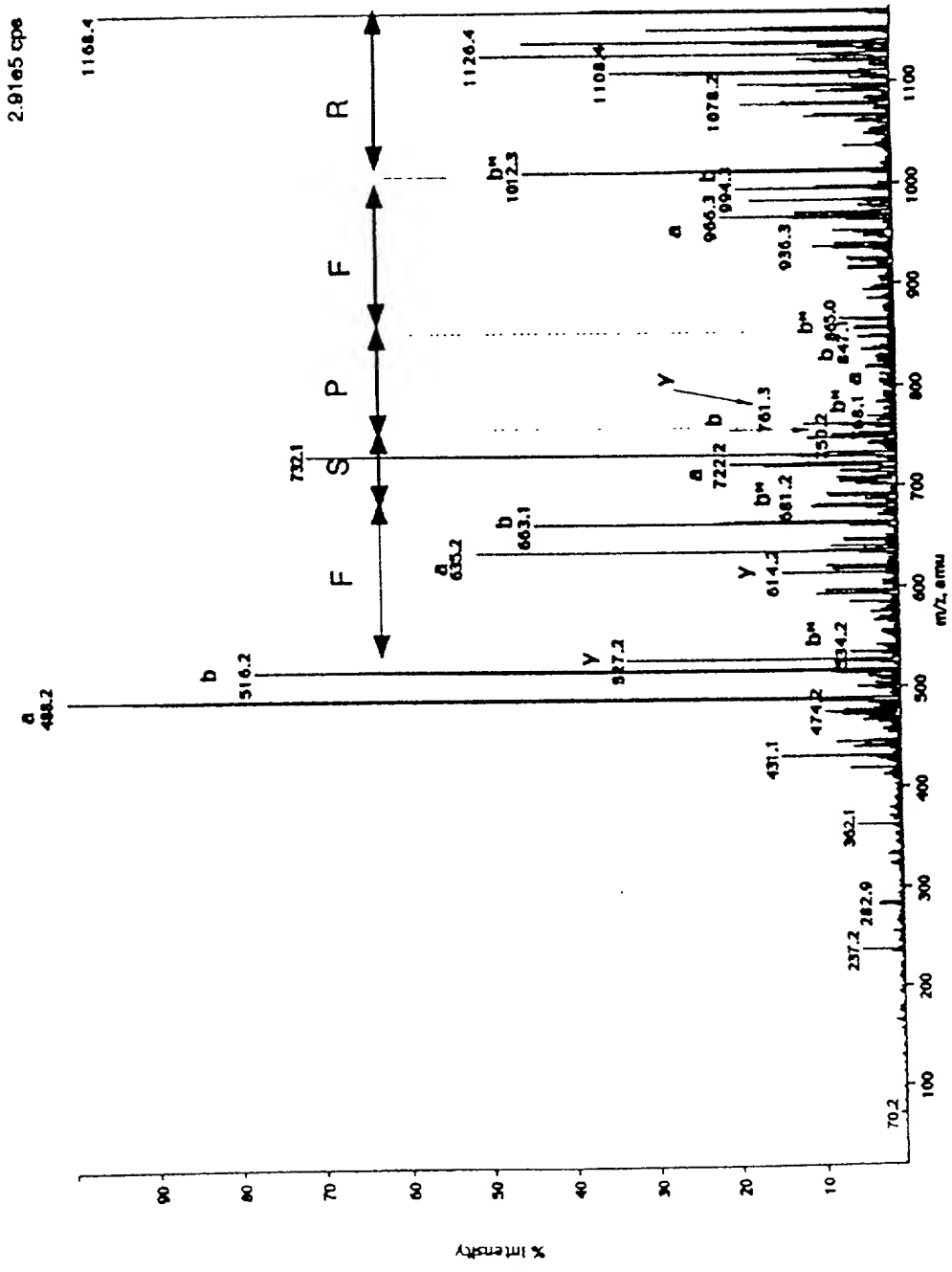

2.91e5 cps
1168.4
1126.4
1108.4
1078.2
1012.3
966.3
994.3
936.3
847.1
761.3
732.1
722.2
681.2
663.1
635.2
614.2
534.2
517.2
516.2
488.2
474.2
431.1
382.1
282.9
237.2
70.2
F S P F R
% Intensity
m/z, amu

FIGURE 5

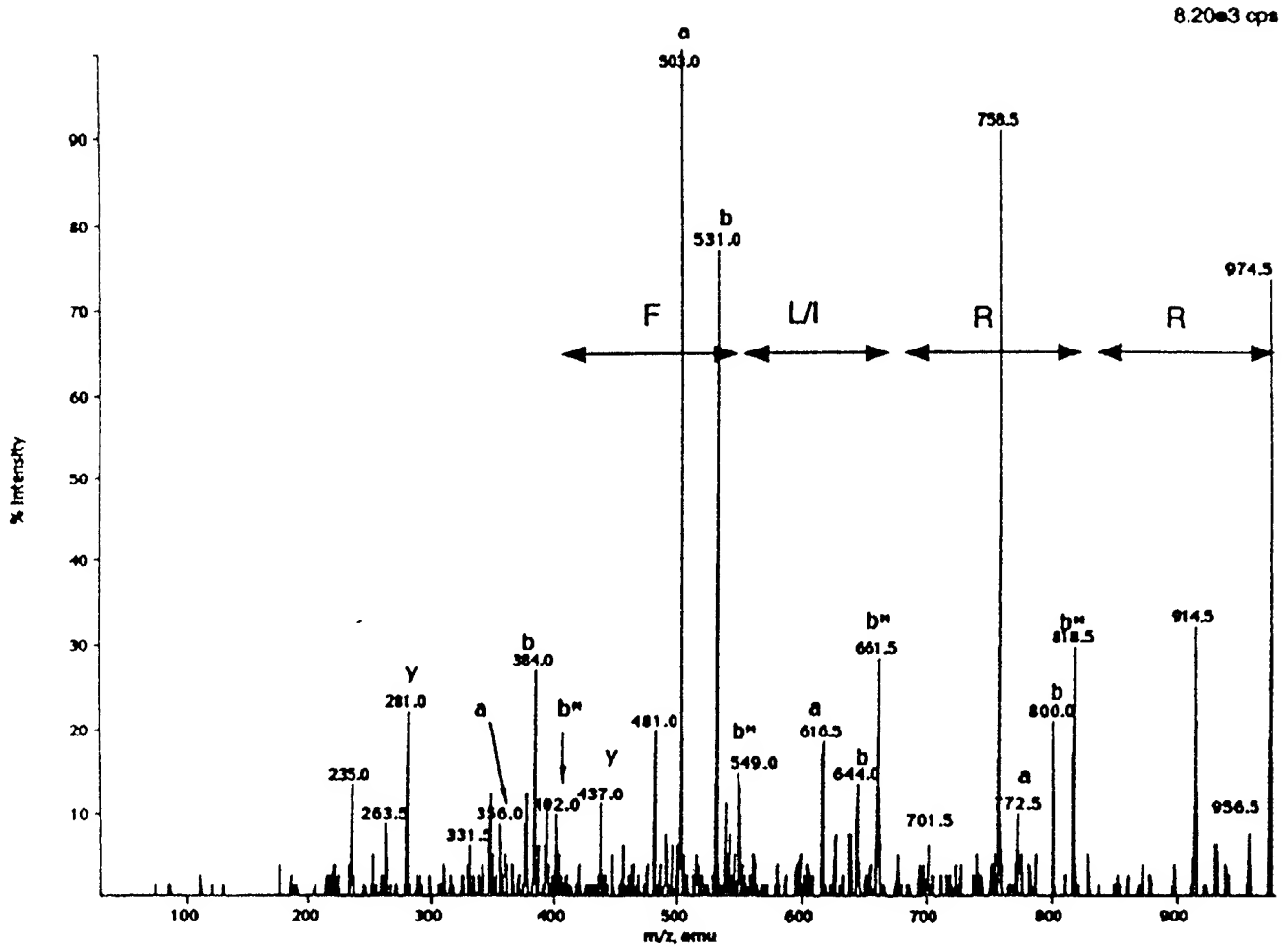
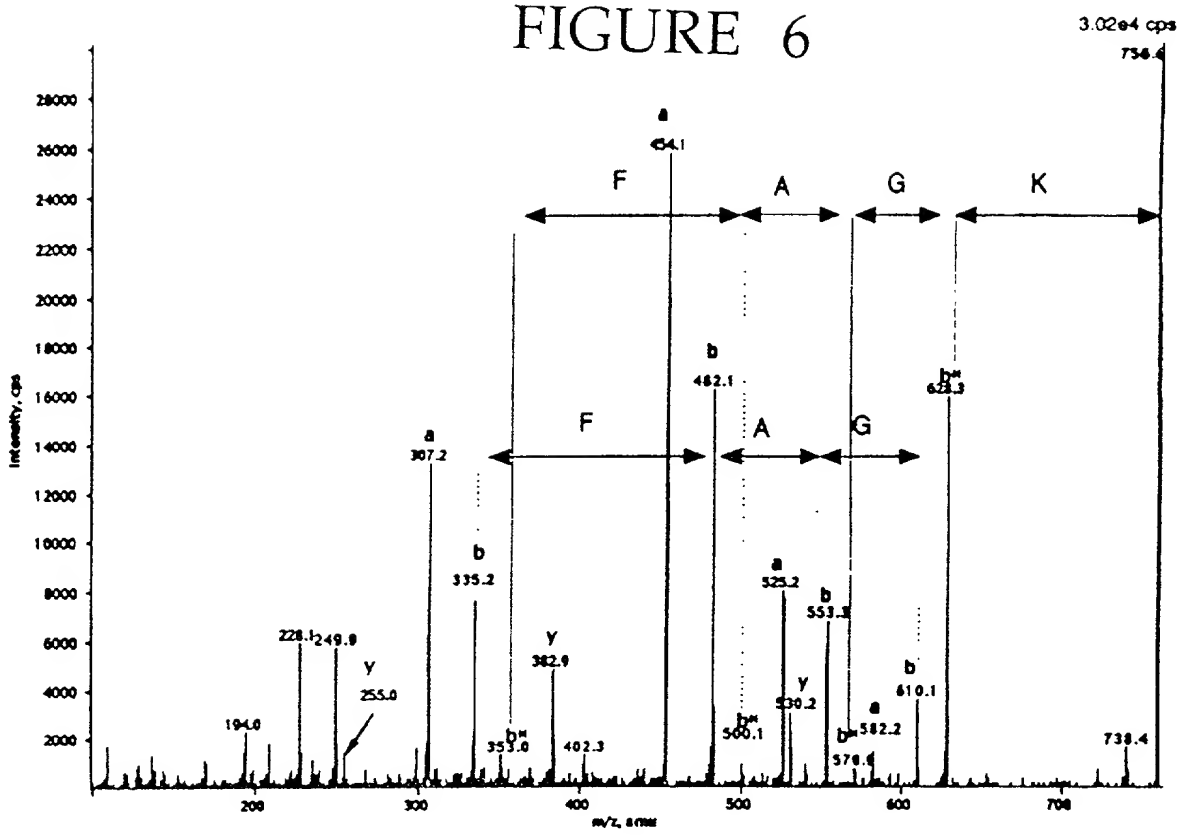

8.20e3 cps
% Intensity
m/z, amu
F
L/I
R
R
a
503.0
b
531.0
758.5
974.5
b
384.0
y
281.0
a
bⁿ
481.0
y
437.0
bⁿ
549.0
a
616.5
bⁿ
661.5
b
644.0
701.5
bⁿ
818.5
b
800.0
914.5
956.5
a
772.5
235.0
263.5
331.5
336.0
392.0

FIGURE 6


3.02e4 cps
Intensity, cps
m/z, amu
F
A
G
K
F
A
G

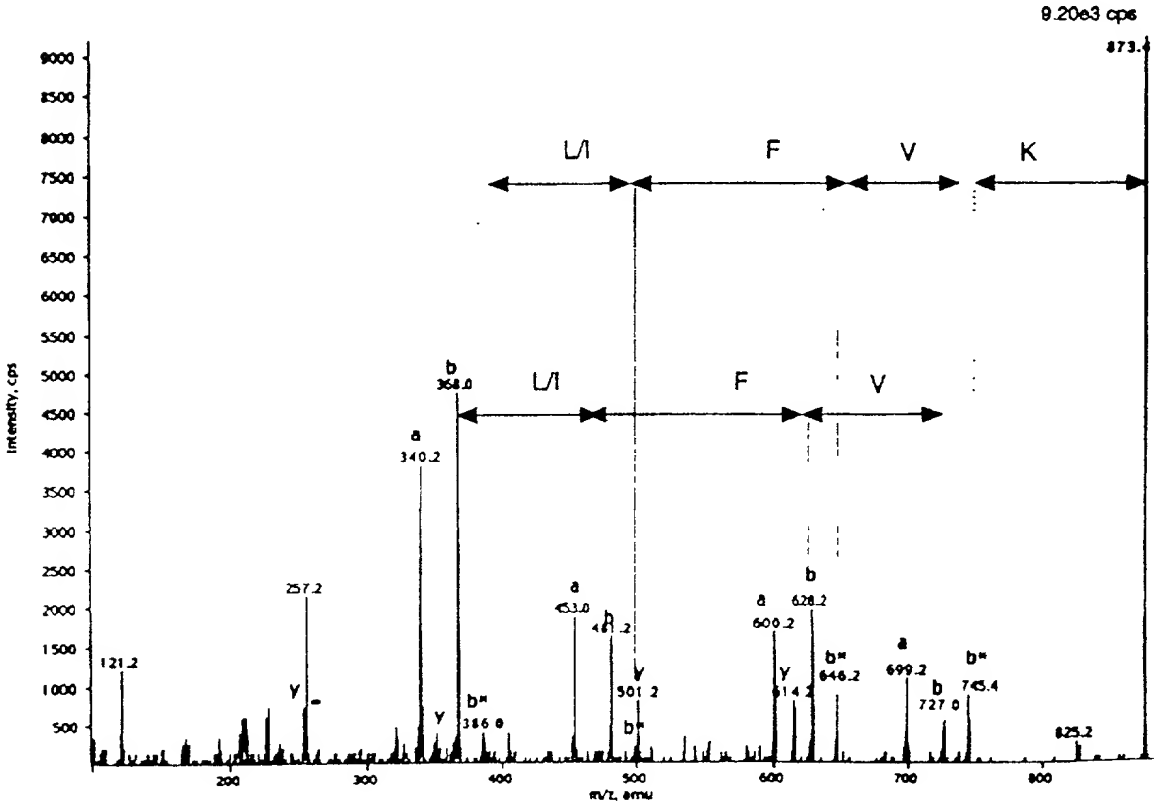

9.20e3 cps
Intensity, cps
m/z, amu
L/I
F
V
K
L/I
F
V

FIGURE 7

```
Option Explicit

'////////////////////////////////////////////////////////////////////
'// Type Declarations

'////////////////////////////////////////////////////////////////////
'// Constant Declarations

Const ciFrmHeight As Integer = 5900        ' // Form height
Const ciFrmWidth As Integer = 9600         ' // Form width

'////////////////////////////////////////////////////////////////////
'// Variable Declarations
Dim iCountFound As Integer                 '// No of series found
'////////////////////////////////////////////////////////////////////
'// Prototypes

'////////////////////////////////////////////////////////////////////
'// Function Declarations

Private Sub Form_Load()
   ' // Initialization
   Call P_LoadForm
End Sub
```

FIGURE 7 (cont'd)

```
'////////////////////////////////////////////////////////////////////
'//
'// Synopsis   : P_LoadForm
'//
'// Name       : Private Sub P_LoadForm()
'//
'// Description : Initialization of the parameters in the form
'//
'// Input      : None
'//
'// Return     : None
'//
'////////////////////////////////////////////////////////////////////
Private Sub P_LoadForm()
   '// Label initialization
   lblFirstRow.Caption = ""
   lblFirstValue.Caption = ""
   lblSecondRow.Caption = ""
   lblSecondValue.Caption = ""
   lblThirdRow.Caption = ""
   lblThirdValue.Caption = ""

   '// Parameters initialization
   'glErrCode = RC_SUCCESS
   'gsErrMsg = ""
End Sub
```

FIGURE 7 (cont'd)

```
Private Sub cmdOK_Click()
   Call P_FirstUpdate
End Sub

'////////////////////////////////////////////////////////////////////
'//
'// Synopsis   : P_FirstUpdate
'//
'// Name       : Private Sub P_FirstUpdate()
'//
'// Description : Update in the first form
'//
'// Input      : None
'//
'// Return     : None
'//
'////////////////////////////////////////////////////////////////////
Private Sub P_FirstUpdate()
   Screen.MousePointer = vbHourglass
   'glErrCode = FindNoSeries
   Screen.MousePointer = vbDefault
   Call FindNoSeries
End Sub

Private Sub cmdCancel_Click()
   Unload Me
   Exit Sub
End Sub

Private Sub Form_Unload(Cancel As Integer)
   ' // Clean up the form
   Call P_UnloadForm
End Sub
```

FIGURE 7 (cont'd)

```
'////////////////////////////////////////////////////////////////////
'//
'// Synopsis   : P_UnloadForm
'//
'// Name       : Private Sub P_UnloadForm()
'//
'// Description : Release the resource which occupied by the parameters
'//              in the form
'//
'// Input      : None
'//
'// Return     : None
'//
'////////////////////////////////////////////////////////////////////
Private Sub P_UnloadForm()

End Sub

'////////////////////////////////////////////////////////////////////
'//
'// Synopsis   : FindNoSeries
'//
'// Name       : FindNoSeries() As Long
'//
'// Description  : Function to update Uex file and stock closing price
'//
'// Input      : N/A
'//
'// Return     : FindNoSeries   RC_SUCCESS    Success
'//                             RC_ERROR      Error
'//
'////////////////////////////////////////////////////////////////////
Public Function FindNoSeries() As Long
  Dim gsPath As String
  Dim gsCEFile As String
```

FIGURE 7 (cont'd)

```
Dim gsErrMsg As String
Dim sExist As String
Dim takeFile As String
Dim giCEFileNo As Integer
Dim bCloseFile As Boolean
Dim sNextLn As String
Dim asNumberFound(800) As String
Dim sFileName As String
'FindNoSeries = RC_ERROR
bCloseFile = True
'gsErrMsg = ""

gsPath = App.Path
'// Name of file is SortRecord
gsCEFile = gsPath & "\" & "SortRecord" & "\"
sExist = Dir(gsCEFile)
sFileName = txtFileName.Text & ".txt"
If sExist = sFileName Then
   bCloseFile = False
End If

If bCloseFile Then
   '// "not found. Update process not proceeded."
   gsErrMsg = "SortRecord not found. Process stops."
   MsgBox (gsErrMsg)
   'FindNoSeries = RC_ERROR
   Exit Function
End If

giCEFileNo = FreeFile
takeFile = gsCEFile & sExist
Open takeFile For Input As #giCEFileNo

Dim lLnNum As Long
```

FIGURE 7 (cont'd)

```
lLnNum = 0
Line Input #giCEFileNo, sNextLn

Do Until UCase(Trim(sNextLn)) = "END"

  '// Validation
  If EOF(giCEFileNo) Then
    '// "Unexpected end of file."
    gsErrMsg = "Unexpected end of file"
    MsgBox (gsErrMsg)
    'FindNoSeries = RC_ERROR
    Exit Function
  End If
  If Not IsNumeric(sNextLn) Then
    '// "Non-numeric input "
    gsErrMsg = "Non-numeric input " & "Row " & lLnNum + 1 & "."
    MsgBox (gsErrMsg)
    'FindNoSeries = RC_ERROR
    Exit Function
  End If
  If lLnNum <> 0 Then
    If Val(asNumberFound(lLnNum - 1)) < Val(sNextLn) Then
      gsErrMsg = "The input numbers are not sorted.(at row " & lLnNum + 1 & " .)"
      MsgBox (gsErrMsg)
      'FindNoSeries = RC_ERROR
      Exit Function
    End If
  End If
  asNumberFound(lLnNum) = sNextLn

  DoEvents
  Line Input #giCEFileNo, sNextLn
  lLnNum = lLnNum + 1
Loop
```

FIGURE 7 (cont'd)

```
If Not EOF(giCEFileNo) Then
   '// "Unexpected end of file"
   gsErrMsg = "Unexpected end of file"
   MsgBox (gsErrMsg)
  ' FindNoSeries = RC_ERROR
   Exit Function
End If

Close #giCEFileNo

Dim lPrimaryNo As String
Dim lSecondaryNo As String
Dim lSecond As String
Dim lTotalNo As Long
Dim iOuterLoop As Integer
Dim iInnerLoop As Integer
Dim bFound As Boolean
Dim bNotFound As Boolean
Dim lMagicNo As String
Dim lTolNo As String
Dim clMagicOne As String
Dim clMagicTwo As String
Dim clTolOne As String
Dim clTolTwo As String
Dim asNumberOutput(200) As Long
Dim iCountOutput As Integer
Dim iFileNum As Integer
Dim putFile As String

'bCloseFile = True

'// Name of output file is "Result"
'gsPath = App.Path
'// Name of file is SortRecord
'gsCEFile = gsPath & "\" & "Result" & "\"
```

FIGURE 7 (cont'd)

```
'sExist = Dir(gsCEFile)
'If sExist = "Try1.txt" Then
'   bCloseFile = False
'End If

'If bCloseFile Then
   '// "not found. Update process not proceeded."
'   gsErrMsg = "Result not found. Process stops."
'   MsgBox (gsErrMsg)
   'FindNoSeries = RC_ERROR
'   Exit Function
'End If


'// Open file for writing result
iFileNum = FreeFile
putFile = App.Path & "\" & "Result" & "\" & txtFileName.Text & ".txt"
Open putFile For Append As #iFileNum

'// Set initial value
iCountFound = 0
clMagicOne = Val(txtDiff1.Text)
clMagicTwo = Val(txtDiff2.Text)
clTolOne = Val(txtTol1.Text)
clTolTwo = Val(txtTol2.Text)
bFound = False
bNotFound = False
iCountOutput = 0
lMagicNo = clMagicOne
lTotalNo = lLnNum
For iOuterLoop = 0 To (lTotalNo - 1)
   lPrimaryNo = asNumberFound(iOuterLoop)
   '// Set all captions
   lblFirstValue.Caption = lPrimaryNo
   lblFirstRow.Caption = iOuterLoop + 1
```

FIGURE 7 (cont'd)

```
lblSecondValue.Caption = ""
lblSecondRow.Caption = ""
lblThirdValue.Caption = ""
lblThirdRow.Caption = ""
'// Reset variables in innerloop
   bFound = False
   bNotFound = False
   lMagicNo = clMagicOne
   lTolNo = clTolOne
'// set innerloop begin value
iInnerLoop = iOuterLoop + 1
'// do until end of list or pattern found or not found
Do Until bFound Or bNotFound Or (iInnerLoop > lTotalNo - 1)
   lSecondaryNo = asNumberFound(iInnerLoop)
   If (Val(lPrimaryNo) - Val(lSecondaryNo)) >= (Val(lMagicNo) - Val(lTolNo)) And _
   (Val(lPrimaryNo) - Val(lSecondaryNo)) <= (Val(lMagicNo) + Val(lTolNo)) Then
      If lMagicNo = clMagicTwo Then
         lblThirdValue.Caption = lSecondaryNo
         lblThirdRow.Caption = iInnerLoop + 1
         bFound = True
         'FindNoSeries = RC_SUCCESS
         Write #iFileNum, lPrimaryNo & " & " & lSecond & _
            " & " & lSecondaryNo

         'Write #iFileNum, lPrimaryNo & " & " & lSecond & " & " & lSecondaryNo
            '((lPrimaryNo - 18 + lSecond + lSecondaryNo + 28) / 3)
         iCountFound = iCountFound + 1
      Else
         lblSecondValue.Caption = lSecondaryNo
         lblSecondRow.Caption = iInnerLoop + 1
         lSecond = lSecondaryNo
         lMagicNo = clMagicTwo
         lTolNo = clTolTwo
      End If
   ElseIf (Val(lSecondaryNo) - Val(lPrimaryNo)) > Val(lMagicNo) Then
```

FIGURE 7 (cont'd)

```
            bNotFound = True
          End If
          iInnerLoop = iInnerLoop + 1
        Loop
      Next
      '// Close file
      Close #iFileNum

      If bFound = False Then
        'FindNoSeries = RC_NOT_FOUND
      End If

      If iCountFound <> 0 Then
        lblTrueFalse.Caption = "True"
        MsgBox (iCountFound & " specific series number are found and save in " & txtFileName.Text &
".txt!!")
      Else
        lblTrueFalse.Caption = "False"
        MsgBox ("The specific series number is not found!!!!")
      End If

End Function
```